

WHAT IS CLAIMED IS:

1. An optical disc drive, which performs a data write operation on an optical disc by irradiating the optical disc with light such that a plurality of marks are formed on the optical disc, the optical disc drive comprising:

an optical head including a light source and a photodetector and for outputting a first read signal by getting the light emitted from the light source, reflected from the optical disc, and then detected by the photodetector;

a read signal processor for processing the first read signal received into a second read signal and outputting the second read signal in response to one of a first control signal and a second control signal, wherein the second read signal output by the read signal processor in response to the first control signal is held at a predetermined level, while the second read signal output by the read signal processor in response to the second control signal has a level corresponding to that of the first read signal; and

a controller for generating the first and second control signals and outputting the first control signal during a first period and the second control signal during a second period following the first period, respectively, the first period beginning before the marks are formed and ending while the marks are being formed,

wherein the optical disc drive controls the data write

operation in accordance with the second read signal that has been output from the read signal processor.

2. The optical disc drive of claim 1, wherein the first read signal exhibits a spike waveform during the first period, and

wherein the controller generates the second control signal after the spike waveform has disappeared.

3. The optical disc drive of claim 2, wherein the controller determines, by the amount of time that has passed since light having an intensity high enough to form the marks started to be emitted from the light source, whether the spike waveform has disappeared or not.

4. The optical disc drive of claim 3, wherein the read signal processor defines the predetermined value to be lower than the level of the spike waveform.

5. The optical disc drive of claim 1, wherein the optical head outputs the first read signal by cutting off its waveform portions having levels that exceed a predetermined dynamic range.

6. The optical disc drive of claim 5, wherein the

optical head outputs the first read signal by cutting off portions of the spike waveform.

7. The optical disc drive of claim 6, wherein the optical head outputs the first read signal having a gain that falls within the predetermined dynamic range.

8. The optical disc drive of claim 1, further comprising an averaging processor for averaging the second read signal received from the read signal processor and outputting an averaged second read signal,

wherein the optical disc drive controls the data write operation in accordance with the averaged second read signal.

9. The optical disc drive of claim 1, wherein the optical disc drive controls the data write operation by at least one of servo control, write clock control, motor control, and optical power control techniques.

10. A method of performing a data write operation on an optical disc by irradiating the optical disc with light such that a plurality of marks are formed on the optical disc, the method comprising the steps of:

detecting the light that has been emitted from a light source and then reflected from the optical disc;

outputting a first read signal that represents the light detected;

processing the first read signal into a second read signal and outputting the second read signal in response to one of a first control signal and a second control signal, wherein the second read signal being output in response to the first control signal is held at a predetermined level, while the second read signal being output in response to the second control signal has a level corresponding to that of the first read signal;

generating the first and second control signals and outputting the first control signal during a first period and the second control signal during a second period following the first period, respectively, the first period beginning before the marks are formed and ending while the marks are being formed; and

controlling the data write operation in accordance with the second read signal.

11. A computer program product for use with an optical disc drive including an optical head, a read signal processor and a controller and performing a data write operation on an optical disc by irradiating the optical disc with light such that a plurality of marks are formed on the optical disc, the optical head including a light source that emits the light and

a photodetector that detects the light, wherein the computer program product causes the optical disc drive to perform steps of:

emitting the light emitted from the light source;

detecting the light, which has been reflected from the optical disc, by means of the photodetector;

outputting a first read signal, representing the light detected, from the optical head;

generating a second read signal at the read signal processor in response to one of a first control signal and a second control signal, wherein the second read signal being output in response to the first control signal is held at a predetermined level, while the second read signal being output in response to the second control signal has a level corresponding to that of the first read signal;

generating the first and second control signals at the controller during a first period and during a second period following the first period, respectively, the first period beginning before the marks are formed and ending while the marks are being formed; and

controlling the data write operation in accordance with the second read signal.

12. A control processor, which is included in an optical disc drive and which selectively operates in one of a

first operation mode and a second operation mode, the optical disc drive performing a data write operation on an optical disc by irradiating the optical disc with light such that a plurality of marks are formed on the optical disc, the optical disc drive comprising

an optical head including a light source and a photodetector and outputting a first read signal by getting the light emitted from the light source, reflected from the optical disc, and then detected by the photodetector, and

a read signal processor for processing the first read signal received into a second read signal and outputting the second read signal in response to one of a first control signal and a second control signal, wherein the second read signal output by the read signal processor in response to the first control signal is held at a predetermined level, while the second read signal output by the read signal processor in response to the second control signal has a level corresponding to that of the first read signal, and

wherein while operating in the first operation mode, the control processor generates and outputs the first control signal during a first period and the second control signal during a second period following the first period, respectively, the first period beginning before the marks are formed and ending while the marks are being formed, and

wherein while operating in the second operation mode, the

control processor generates and outputs the first control signal during a third period and the second control signal during a fourth period following the third period, respectively, the third period not overlapping with the first period.